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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/588,398	08/03/2006	Samuel Bron	0-06-172 (17660/US/CIP)	8382
42009	7590	07/15/2010	EXAMINER	
KEVIN D. MCCARTHY ROACH BROWN MCCARTHY & GRUBER, P.C. 424 MAIN STREET 1920 LIBERTY BUILDING BUFFALO, NY 14202			GODENSCHWAGER, PETER F	
			ART UNIT	PAPER NUMBER
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/588,398	<b>Applicant(s)</b> BRON ET AL.	
	<b>Examiner</b> PETER F. GODENSCHWAGER	<b>Art Unit</b> 1796	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 23 April 2010.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-26 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                    | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)         | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                          |

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### **DETAILED ACTION**

Applicant's reply filed April 23 2010 has been fully considered. Claims 1 and 14 are amended, and claims 1-26 are pending.

#### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1-7, 12, and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Barry et al. (US Pat. No. 5,338,478) in view Ferrero-Heredia et al. (US Pat. No. 5,530,035).

Barry et al. teaches a stabilizer composition for preventing scorching in polyurethane foams containing flame retardants (Column 1, Lines 51 – 61; Column 4, Line 64 – Column 5,

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Line 3). A mixture of two types of antioxidant agents, a diarylamine and a hindered phenol, is used in the composition (Column 1, Lines 51 – 61). The diarylamine used may also be a mixture of alkylated diphenylamines (Column 2, Lines 10 – 26). The stabilizer composition further comprises a pentaerythritol phosphite such as bis(2,4-di-*t*-butylphenyl)pentaerythritol diphosphite (Column 1, Lines 51 – 61; Column 2, Line 59 – Column 3, Line 9). The stabilizer composition may be added to a polyurethane foam-forming reaction mixture which may further comprise stannous octoate, a metallic salt of carboxylic acid (Column 3, Lines 46 – 63 and Column 4, Lines 39 – 48). As Barry et al. does not teach the composition comprising dimethylhydrazine, the composition is deemed to be free of dimethylhydrazine.

Barry et al. does not teach the composition further comprises an epoxy compound such as bisphenol A diglycidyl ether. However, Ferrero-Heredia et al. teaches a polyurethane foaming composition (2:30-40) comprising an alkaline reagent in a bisphenol A diglycidyl ether carrier liquid (3:10-15; 3:40-45; 4:35-55, Example 1). Barry et al. and Ferrero-Heredia et al. are analogous art because they are concerned with the same field of endeavor namely the production of polyurethane foams. At the time of the invention, a person of ordinary skill in the art would have found it obvious to use the alkaline reagent in a bisphenol A diglycidyl ether carrier liquid of Ferrero-Heredia et al. in the polyurethane foaming composition of Barry et al. and would have been motivated to do so because Ferrero-Heredia et al. teaches that the alkaline reagent in a bisphenol A diglycidyl ether allows for forming polyurethane foams with low thermal conductivity which provide better insulation properties (1:5-15; 2:1-25). Furthermore, Barry et al. teaches that various additives can be employed in the polyurethane foaming composition to provide different properties (4:64-68).

The Examiner recognizes that all of the claimed physical properties are not positively taught by the reference, namely that the composition prevents discoloration, embrittlement, and spontaneous combustion in polyurethane blocks. However, the combined references render obvious all of the claimed ingredients, process steps, and/or process conditions of the composition. Therefore, the claimed physical properties would inherently be achieved by the composition as claimed and rendered obvious. If it is the Applicant's position that this would not be the case: (1) evidence would need to be presented to support Applicant's position; and (2) it would be the Examiners's position that the application contains inadequate disclosure that there is no teaching as to how to obtain the claimed properties with only the claimed ingredients, process steps, and/or process conditions.

Claims 8-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Barry et al. (US Pat. No. 5,338,478) in view of Ferrero-Heredia et al. (US Pat. No. 5,530,035) as applied to claim 1 above as evidenced by Horacek (US Pat. No. 5,106,883).

Barry et al. in view of Ferrero-Heredia et al. render obvious the composition of claim 1 as set forth above. Barry et al. further teaches the composition comprising the fire retardant Thermolin 101 from Olin Corp. (Example 2). While Barry et al. do not expressly teach the chemical composition of Thermolin 101, Horacek teaches Thermolin 101 to be ethylene glycol bis(di-2-chloroethyl phosphate) (Column 3, Lines 11 - 12).

Furthermore, a composition is evaluated by what it is rather than what it does. Independent Claim 1 is related to a composition whereas Claims 8 - 11 provide limitations regarding a foam, which has not been claimed, into which the composition of Claim 1 can be

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incorporated. Accordingly, Claims 8 - 11 are not further limiting in as so far as the composition of Claim 1 is concerned.

Claims 14-20, 25, and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Barry et al. (US Pat. No. 5,338,478) in view of Ferrero-Heredia et al. (US Pat. No. 5,530,035).

Barry et al. teach a method for preventing scorching in polyurethane foams containing flame retardants through the use of a stabilizing composition (Column 1, Lines 51 – 61; Column 4, Line 64 – Column 5, Line 3). The composition may be added to the reaction mixture used to form the foam prior to foaming (Example 2). A mixture of two types of antioxidant agents, a diarylamine and a hindered phenol, is used in the composition (Column 1, Lines 51 – 61). The diarylamine used may also be a mixture of alkylated diphenylamines (Column 2, Lines 10 – 26). The stabilizer composition further comprises a pentaerythritol phosphite such as bis(2,4-di-*t*-butylphenyl)pentaerythritol diphosphite (Column 1, Lines 51 – 61; Column 2, Line 59 – Column 3, Line 9). The stabilizer composition may be added to a foamable reaction mixture which may further comprise stannous octoate, a metallic salt of carboxylic acid (Column 3, Lines 46 – 63 and Column 4, Lines 39 – 48). As Barry et al. does not teach the composition comprising dimethylhydrazine, the composition is deemed to be free of dimethylhydrazine.

Barry et al. does not teach the method further comprising adding an epoxy compound such as bisphenol A diglycidyl ether. However, Ferrero-Heredia et al. teaches adding to a polyurethane foaming composition (2:30-40) an alkaline reagent in a bisphenol A diglycidyl ether carrier liquid (3:10-15; 3:40-45; 4:35-55, Example 1). Barry et al. and Ferrero-Heredia et al. are analogous art because they are concerned with the same field of endeavor namely the

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production of polyurethane foams. At the time of the invention, a person of ordinary skill in the art would have found it obvious to use the alkaline reagent in a bisphenol A diglycidyl ether carrier liquid of Ferrero-Heredia et al. in the polyurethane foaming composition of Barry et al. and would have been motivated to do so because Ferrero-Heredia et al. teaches that the alkaline reagent in a bisphenol A diglycidyl ether allows for forming polyurethane foams with low thermal conductivity which provide better insulation properties (1:5-15; 2:1-25). Furthermore, Barry et al. teaches that various additives can be employed in the polyurethane foaming composition to provide different properties (4:64-68). While Ferrero-Heredia et al. does not teach that the alkaline reagent in a bisphenol A diglycidyl ether carrier liquid is added for preventing or diminishing scorch, preventing discoloration, embrittlement, and spontaneous combustion, the references when taken together teach all of the claimed ingredients, process steps and process conditions. Therefore, the claimed properties would inherently be achieved by the method as claimed and rendered obvious. If it is the Applicant's position that this would not be the case: (1) evidence would need to be presented to support Applicant's position; and (2) it would be the Examiner's position that the application contains inadequate disclosure that there is no teaching as to how to obtain the claimed properties with only the claimed ingredients, process steps, and process conditions.

Claims 21-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Barry et al. (US Pat. No. 5,338,478) in view of Ferrero-Heredia et al. (US Pat. No. 5,530,035) as applied to claim 14 above, as evidenced by Horacek (US Pat. No. 5,106,883).

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Barry et al. in view of Ferrero-Heredia et al. render obvious the method of Claim 14 wherein the stabilizing composition is added to a mixture for preparing a polyurethane foam as set forth above. The method further comprises adding the fire retardant Thermolin 101 from Olin Corp. (Example 2). While Barry et al. does not expressly teach the composition of Thermolin 101, Horacek teach Thermolin 101 to be ethylene glycol bis(di-2-chloroethyl phosphate) (Column 3, Lines 11 - 12).

### ***Response to Arguments***

Applicant's arguments filed April 23, 2010 have been fully considered but they are not persuasive.

In response to applicant's argument that the stannous octoate of Barry et al. is used as a catalyst in the polymerization/foaming and not used as an essential part of the anti-scorch composition, a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. As set forth in the rejection above, the combined references render obvious all of the claimed ingredients, process steps, and/or process conditions of the composition. Therefore, the claimed physical properties would inherently be achieved by the composition as claimed and rendered obvious. If it is the Applicant's position that this would not be the case: (1) evidence would need to be presented to support Applicant's position; and (2) it would be the Examiners's position that the application contains inadequate disclosure that there



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is no teaching as to how to obtain the claimed properties with only the claimed ingredients, process steps, and/or process conditions.

In response to applicant's argument that Ferrero-Heredia et al. uses epoxybisphenol as an inert carrier liquid to enable slow removal of CO<sub>2</sub> and not for preventing scorching, the fact that applicant has recognized another advantage which would flow naturally from following the suggestion of the prior art cannot be the basis for patentability when the differences would otherwise be obvious. See *Ex parte Obiaya*, 227 USPQ 58, 60 (Bd. Pat. App. & Inter. 1985). It should be noted that should Applicant want to rely on a showing of unexpected results, such allegations must be based on evidence, not argument or speculation (see MPEP 2145).

In response to applicant's argument that Barry et al. and Ferrero-Heredia et al. is nonanalogous art, it has been held that a prior art reference must either be in the field of Applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the applicant was concerned, in order to be relied upon as a basis for rejection of the claimed invention. See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). In this case, both Barry et al. and Ferrero-Heredia et al. are in the Applicant's field of endeavor, namely the production of polyurethane foams. It is further noted that while Barry et al. and Ferrero-Heredia et al. each address specific problems in the field of polyurethane foam production, there is no evidence that they are incompatible with each other. As set forth above, Barry et al. teaches that various additives can be employed in the polyurethane foaming composition to provide different properties (4:64-68), and Ferrero-Heredia et al. teaches that the alkaline reagent in a bisphenol A diglycidyl ether allows for forming polyurethane foams with low thermal conductivity which provide better insulation properties (1:5-15; 2:1-25). These teachings are completely compatible,

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and the above teachings provide clear motivation for why one of ordinary skill in the art would use the alkaline reagent in a bisphenol A diglycidyl ether in the composition of Barry et al. (improved insulation).

In response to applicant's arguments specifically concerning claims 14-26, the recitation “for preventing or diminishing scorch in a flame-retarded flexible polyurethane foam, and for preventing discoloration, embrittlement, and spontaneous combustion in the polyurethane blocks” in claim 14 has been given little patentable weight because the recitation occurs in the preamble. A preamble is generally not accorded any patentable weight where it merely recites the purpose of a process or the intended use of a structure, and where the body of the claim does not depend on the preamble for completeness but, instead, the process steps or structural limitations are able to stand alone. See *In re Hirao*, 535 F.2d 67, 190 USPQ 15 (CCPA 1976) and *Kropa v. Robie*, 187 F.2d 150, 152, 88 USPQ 478, 481 (CCPA 1951).

In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

Applicant argues that one of ordinary skill in the art would have to exclude the hydroxide of Ferrero-Heredia et al. (see Pg. 3, last paragraph of Applicant's reply). However, it should be

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noted that the instant claims use the language “comprising” and thus do not exclude additional components or steps.

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

### ***Correspondence***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to PETER F. GODENSCHWAGER whose telephone number is (571)270-3302. The examiner can normally be reached on Monday-Friday 7:30-5:00 EST.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Eashoo can be reached on (571) 272-1197. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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